

Appl. No. 09/229,283  
Responsive to Office Action dated April 19, 2006  
Amendment dated October 19, 2006

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### **Listing of the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (PREVIOUSLY PRESENTED) A method for screening for melanoma using immunohistochemistry to determine whether microphthalmia (Mi) is expressed which comprises:
  - (a) contacting *in vitro* a biological specimen containing malignant cells with an antibody that selectively binds to human microphthalmia (Mi); and
  - (b) determining whether Mi is being expressed in the specimen by the binding of the antibody to Mi, wherein the expression of Mi in a malignant cell is indicative of melanoma.
- 2-3. (CANCELLED)
4. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the biological specimen consists of malignant cells.
- 5-12. (CANCELLED)
13. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the antibody is a monoclonal antibody.
14. (PREVIOUSLY PRESENTED) A method for screening for melanoma using immunohistochemistry to determine whether microphthalmia (Mi) is expressed which comprises:

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- (a) contacting *in vitro* a biological specimen containing malignant cells with a monoclonal antibody that selectively binds to an epitope in the N-terminus Taq-Sac fragment of human Mi; and
  - (b) determining whether Mi is being expressed in the specimen by the binding of the antibody to Mi, wherein the expression of Mi in a malignant cell is indicative of melanoma.
15. (CANCELLED)
16. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the biological sample is on a slide.
17. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the antibody is used to determine where in the malignant cell the Mi is expressed.
18. (PREVIOUSLY PRESENTED) A method for screening for melanoma using immunohistochemistry to determine whether microphthalmia (Mi) is expressed which comprises:
- (a) contacting *in vitro* a biological specimen containing malignant cells with an antibody raised against peptides comprising regions of human microphthalmia (Mi) unique to human Mi that selectively binds human Mi; and
  - (b) determining whether Mi is being expressed in the specimen by the binding of the antibody to Mi, wherein the expression of Mi in a malignant cell is indicative of melanoma.

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19. (PREVIOUSLY PRESENTED) The method of claim 18, wherein the biological specimen consists of malignant cells.
20. (PREVIOUSLY PRESENTED) The method of claim 18, wherein the antibody is a monoclonal antibody.
21. (CURRENTLY AMENDED) ~~The method of claim 20~~ A method for screening for melanoma using immunohistochemistry to determine whether microphthalmia (Mi) is expressed which comprises:
- (a) contacting *in vitro* a biological specimen containing malignant cells with an antibody raised against peptides comprising regions of human microphthalmia (Mi) unique to human Mi that selectively binds human Mi; and
- (b) determining whether Mi is being expressed in the specimen by the binding of the antibody to Mi, wherein the expression of Mi in a malignant cell is indicative of melanoma.
- wherein the antibody is a monoclonal antibody and wherein the antibody is generated using an epitope in the N-terminus Taq-Sac fragment of human Mi.
22. (PREVIOUSLY PRESENTED) The method of claim 18, wherein the biological sample is on a slide.
23. (PREVIOUSLY PRESENTED) The method of claim 18, wherein the antibody is used to determine where in the malignant cell the Mi is expressed.